MRIP License Survey Project Meeting June 24-25, 2008 DRAFT Meeting Summary

June 24, 2008

- Measurement Error: Has measurement error in the current surveys been assessed? Measurement error could propagate through estimation and have large impact in estimates. Has not been assessed for the MRFSS. The CRFS ALDS has added questions to determine why the actual number saltwater trips would be different from the number of trips initially reported at the outset of the interview. The numbers change (generally drop) because some reported trips occurred above saltwater cut-off points and are considered freshwater trips.
- A question was raised about the need to estimate the absolute number of landed fish as opposed to relative changes in landings from year-to-year. Both are important and used for different purposes. There is a need to continue to estimate absolute removals.
- A question was raised about the completeness of intercept survey sampling frames. Specifically, what proportion of fishing trips originate or occur at sites that are accessible to samplers. The percent of trips occurring from private and public sites can be estimated from the MRFSS Coastal Household Telephone Survey and the CRFS ALDS.
- The possibility of estimating both catch and effort from a single survey (rather than a complemented surveys approach) was discussed. Historical MRFSS documentation describe the rationale for the current complemented surveys approach, as well as limitations of collecting certain types of data through certain survey modes (**Distribute documentation**).
- Bryan Wright (Oregon Department of Fish and Wildlife) presented an overview of the Oregon Shore and Estuary Boat Survey, which uses an angler license database as a sampling frame
 - o Currently not being conducted due to funding constraints.
 - There have been independent analyses of SEBS data (ODFW and PSMFC). However, it is not known if the results of those analyses have been compared to each other.
 - o Approximately 30% of records in sample frame are missing telephone numbers. Reverse directory matching lowers this to about 20%.
 - O Duplicates are removed prior to sample selection. This can be a laborious process. Software (freeware) has been developed to identify duplicates.
 - o Sample frame includes both saltwater and freshwater anglers (over coverage).

- Surprisingly low incidence of saltwater fishing (Range:2-21%, Average: 10%). MRFSS CHTS numbers from same period range from 2%-7.5%.
 Inclusion of freshwater anglers in frame may contribute to low incidence.
- o SEBS does not exclude cell phones.
- o SEBS frame exemptions include anglers < 14 (exempt from license) and illegal, unlicensed anglers.
- Rob Andrews (NMFS, Office of Science and Technology) provided an overview
 of a dual-frame fishing effort survey that has been implemented in the Gulf of
 Mexico and North Carolina.
 - Gulf Angler License Directory Survey (ALDS) implemented in wave 2, 2007, in response to recommendations from NRC Review of Recreational Fisheries Survey Methods.
 - o ALDS utilizes saltwater fishing license databases in FL, AL, MS and LA as sampling frames
 - o Frames are incomplete due to licensing exemptions.
 - Quality of frames vary, but all are missing a large proportion of telephone numbers (50-75% missing numbers)
 - o ALDS was integrated with CHTS in dual-frame approach to compensate for gaps in ALDS sampling frames.
 - Independent estimates of "linked" (overlapping) domains (licensed, coastal anglers) generally not very close for total angler trips. Need to compare mean trips per angler.
 - Dual-frame approach increases coverage. Need to calculate coverage from intercept survey (% intercepted anglers within and outside coverage areas).
- Phil Law (CA Department of Fish and Game) provided and overview of the California Recreational Fishing Survey (CRFS)
 - o Includes several component surveys including both field and phone effort surveys (California Licensing added a place on multiple paper license book 'covers' to collect a name and phone number from one angler who is sold a paper license from the license book. The book covers are torn off by Licensing and sent to the telephone contractor who uses them as a sample list. There is no 'State License Database'.)
 - Have there been comparisons between estimates derived from field and phone surveys? Comparisons have been conducted and phone estimates are higher (as per Wade Van Buskirk).

June 25, 2008

• Based upon the reauthorized Magnuson-Stevens Act (MSA), there is an expectation that an angler registry or saltwater license databases will be used to collect fishing effort data. NRC thought that a registry would be more efficient. This may or may not be true in all cases, but it may be irrelevant due to MSA.

- The focus of the project should be on how we can make frames more usable for surveys, and how gaps in frames can be accounted for. Increasing the quality of frames may increase efficiency.
- Quantify the costs of having to rely on dual-frames.
- Conduct periodic assessments of biases.
 - o Mail surveys
 - o Matching names collected during intercept survey to registry frames to assess magnitude of exemptions.
- Frames need to be evaluated on a state-by-state basis.

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• License attrition: What percent of license frames are persistent anglers (buy license every year)? Compare behavior of persistent anglers to non-persistent anglers.

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- Reviewed proposed registry rule (RA sent to project team)
 - o Several exemptions (<16, fishing from licensed for-hire vessel, fishing from licensed fishing pier)
 - o Annual updates
- Discussed overlap of Design and Analysis Work Group Projects
 - o Changes to intercept sampling resulting from other projects may increase the utility of the intercept survey as sampling frame for effort surveys
 - The need to develop integrated, multi-purpose pilot projects was discussed.
 - The Joint Statistical Meeting is being held August 3-7 in Denver, CO.
 Several of the MRIP consultants will be attending, so this may be a good venue for the consultants to meet and discuss overlap among the projects.
 RA will pursue this possibility further.
- There was agreement that the difficultly ensuring a probability sample from the intercept survey limits its utility as a sample frame for collecting fishing effort data. A better approach would be to use the registry/license frame and some other type of other random household survey (RDD or mail).

Mike and Lynne will provide the following information:

- 1. Assessment of implications, from a survey design standpoint, if the Federal Angler Registry is implemented as described in the proposed rule.
- 2. Description of analyses that need to be completed to effectively implement a dual-frame methodology that utilizes license/registry frames and the CHTS (RDD).
- 3. Assessment of potential alternate survey frames.

NMFS is also interested in getting feedback about current survey questionnaires, data protocols, etc (identify improvements to existing surveys).